

Attorney Docket No. 5000.113A Confirmation No. 1789

PATENT

Match and Return

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: David B. Slater, Jr. Serial No. 10/003,331

Group Art Unit: 2818

Examiner: David Vu

Filed: October 31, 2001

LOW TEMPERATURE FORMATION OF BACKSIDE For:

OHMIC CONTACTS FOR VERTICAL DEVICES

December 23, 2003

Commissioner for Patents Alexandria, VA 22313-1450

REQUEST FOR CORRECTION OF INVENTORSHIP

Sir:

This is a request under 35 U.S.C. § 116 and 37 C.F.R. § 1.48 (a)(1) to correct inventorship in a nonprovisional application after the oath or declaration has been filed.

The following items are enclosed:

- (i) a statement from Alexander Suvorov as the omitted inventor being added; 37 C.F.R. § 1.48 (a)(2);
 - (ii) an oath or declaration from inventors Slater and Suvorov; 37 C.F.R. § 1.48 (a)(3);
 - (iii) the 37 C.F.R. § 1.17(i) processing fee of \$130.00, 37 C.F.R. § 1.48 (a)(4); and
 - (iv) the Assignee's statement under 37 C.F.R. § 3.73(b) and the written consent of the

assignee, 37 C.F.R. § 1.48 (a)(5).

ectfully submitted,

Reg. No. 31,573

021176

Summa & Allan, P.A.

11610 North Community House Road Suite 200, Ballantyne Corporate Park Charlotte, North Carolina 28277-2162

Telephone: 704-945-6700

Facsimile: 704-945-6735

\\Server\F\FIRM DOCS\5000\113A\Unventorship122303.doc

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Commissioner for Patents,

P.O. Box 1450, Alexandria, VA 22313-1450, on December 23

01/06/2004 EAREGAY2 00000033 10003331

04 FC:1460 130.00 OP

10 Yz

Attorney Docket No. 5000.113A Confirmation No. 1789

PATENT

Group Art Unit: 2818

Examiner: David Vu

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: David B. Slater, Jr. Serial No. 10/003,331 Filed: October 31, 2001

For: LOW TEMPERATURE FORMATION OF **BACKSIDE OHMIC CONTACTS FOR**

VERTICAL DEVICES

Commissioner for Patents Alexandria, VA 22313-1450

Statement of Dr. Alexander Suvorov

- 1. My name is Alexander Suvorov and I reside at 5 Windcourt Place, Durham, North Carolina 27713.
- 2. I am employed as a scientist at Cree, Inc. in Durham, North Carolina where my areas of concentration comprise doping techniques for silicon carbide, including implantation, diffusion and annealing, and the silicon carbide semiconductor devices that are designed and produced using such techniques.
 - 3. I am a named co-author on a number of scientific publications.
- 4. I am a named inventor on at least four issued U.S. patents and several pending applications, and I am generally familiar with the patent process, including inventorship.
 - 5. Named inventor David Slater is a co-worker of mine at Cree, Inc.
- 6. My omission from the originally-named inventorship in this application was an oversight and was made without deceptive intent on my part.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

A Hodacani Par

PTO/S8/96 (08-03)

Approved for use through 07/31/2006, OMB 0851-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
ork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)
Applicant/Patent Owner: David B. Slater, Jr.
Application No./Patent No.: 10/003,331 Filed/Issue Date: October 31, 2001
Entitled: Low Temperature Formation of Backside Ohmic Contacts for Vertical Devices
Cree, Inc. North Carolina Corporation (North Assessed A
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)
states that it is: 1. ☑ the assignee of the entire right, title, and interest; or
2. an assignee of less than the entire right, title and interest. The extent (by percentage) of its ownership interest is ——————————————————————————————————
A. [/] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 011729, Frame 0074, or for which a copy thereof is attached.
OR .
B. [] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:
1. From:————————————————————————————————————
The document was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
2. From:
The document was recorded in the United States Patent and Trademark Office at
Reel, Frame, or for which a copy thereof is attached.
3. From:To:
The document was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
[] Additional documents in the chain of title are listed on a supplemental sheet.
[] Copies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]
The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.
December 19,2003 Charles M. Swoloda
December 19,2003 Date 919-313-5300 Charles M Sudoda Plyped or printed name Charles M Sudoda Myped or printed name
Telephone number Signature
Prosident and C50
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: David B. Slater, Jr. Serial No. 10/003,331

Group Art Unit: 2818 Examiner: David Vu

Filed: October 31, 2001

For:

LOW TEMPERATURE FORMATION OF BACKSIDE OHMIC CONTACTS FOR

VERTICAL DEVICES

Commissioner for Patents Alexandria, VA 22313-1450

Request for Correction of Inventorship: Consent of Assignee

Sir:

This is part of a request under 35 U.S.C. § 116 and 37 C.F.R. § 1.48 (a)(1) to correct inventorship in a nonprovisional application after the oath or declaration has been filed.

The assignee, Cree, Inc., hereby consents to the correction of inventorship to add Alexander V. Suvorov as a named inventor.

Cree, Inc. is the owner of the entire interest of the patent by assignment and Cree's Statement under 37 C.F.R. § 3.73(b) is being filed concurrently herewith on Form PTO/SB/96.

The undersigned is authorized to act on behalf of assignee Cree, Inc.

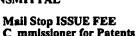
Printed Name: Signature:

Title: President and

Date: 12-19-03

S:\FIRM DOCS\5000\113a\AssigneeConsent.doc





Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

C mmissioner for Patents Alexandria, Virginia 22313-1450 or Fax (703) 746-4000 Hope W

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks I through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block I, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

	90 09/29/2003	with any corrections or use Block 1)	papers. Each addition	f mailing can only be used f his certificate cannot be used al paper, such as an assignment to of mailing or transmission.	for any other accompanying		
	MMUNITY HOUSE	NPE TOTAL	Ce I hereby certify that it States Postal Service addressed to the Ma	rtificate of Mailing or Transhis Fee(s) Transmittal is bein with sufficient postage for full Stop ISSUE FEE address PTO, on the date indicated be	g deposited with the United ast class mail in an envelope above, or being facsimile		
	(20	E 18 2003	Philip	Summa	(Depositor's name) (Signature)		
	(a)		Dece	iber 23, 2	(Date)		
APPLICATION NO.	FILING DATE	FIRST NAM	ED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/003,331 ITLE OF INVENTION: LA	10/31/2001 OW TEMPERATURE FOR		D. Stater JR. IMIC CONTACTS FOR VERTI	S000.113A	1789		
APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE		
nonprovisional	МО	\$1300	\$300	\$1600	12/29/2003		
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
VU, D	AVID	2818	438-020000				
Address form PTO/SB/1: O "Fee Address" indicati PTO/SB/47; Rev 03-02 (Number is required. ASSIGNEE NAME AND PLEASE NOTE: Unless been previously submitte (A) NAME OF ASSIGN	on (or "Fee Address" Indica or more recent) attached. Us RESIDENCE DATA TO E an assignee is identified be d to the USPTO or is being EE	Correspondence agents (firm (ha agent) a agent (be printed on the particular of the	NT (print or type) sear on the patent. Inclusion of a r. Completion of this form is NO NCE: (CITY and STATE OR CO	of a single attorney or tered patent id, no name 3	iste when an assignment has signment.		
		eries (will not be printed on the	· · · · · · · · · · · · · · · · · · ·	derporation or other private g	roup entity		
a. The following fee(s) are	encioseo:	المن ا	ib. Payment of Fee(s): SA check in the amount of the fee(s) is enclosed.				
Publication Fee			at by credit card. Form PTO-2038		•		
Advance Order - # of	Copies 10	Of The Di	rector is hereby authorized by occount Number 50-03	harge the required fee(s), or	credit any overpayment, to copy of this form).		
	sted to apply the Issue Fee a		to re-apply any previously paid	issue fee to the application id	entifled above.		
Authorized Signifure)	Jums	- 12/23/20	01/06/200	04 EAREGAY2 00000033 1	0003331		
NOTE: The Issue Fee an other than the applicant; interest as shown by the re	d Paolication Fee (if require a registered attorney or ag cords of the United States P	red) will not be accepted from ent; or the assignee or other atent and Trademark Office.	party in 01 FC:15	01	1330.00 GP 300.00 GP		
obtam or retain a benefit application. Confidentiality estimated to take 12 minus completed application for case. Any comments on suggestions for reducing 1 Patent and Trademark 22313-1450. DO NOT SEND TO: Commissioner	by the public which is to it is governed by 35 U.S.C. tes to complete, including g m to the USPTO. Time with amount of time you his burden, should be sent Office, U.S. Department END FEES OR COMPLI for Patents, Alexandria, Vii	1.311. The information is re- ille (and by the USPTO to pr 122 and 37 CFR 1.14. This co- pathering, preparing, and submill vary depending upon the irequire to complete this for to the Chief Information Off- of Commerce, Alexandria, 3TED FORMS TO THIS Al 3ginia 22313-1450. persons are required to resp	ocess) an llection is inting the ndividual m and/or icer, U.S. Virginia DDRESS.	51	30.00 OP		
collection of information u	inless it displays a valid OM	B control number.		•			



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address COMMISSIONER FOR PATENTS
P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10	0/003,331	10/31/2001	2818	1488	5000.113A	2	33	4

21176 SUMMA & ALLAN, P.A. 11610 NORTH COMMUNITY HOUSE ROAD SUITE 200 CHARLOTTE, NC 28277 CONFIRMATION NO. 1789
CORRECTED FILING RECEIPT

OC000000012058528

Date Mailed: 03/09/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

David B. Slater JR., Raleigh, NC; ALEXANDER SUVOROV, DURHAM, NC;

Domestic Priority data as claimed by applicant

This application is a CIP of 09/787,189 03/15/2001

Foreign Applications

If Required, Foreign Filing License Granted: 01/08/2002

Projected Publication Date: Not Applicable

Non-Publication Request: No

Early Publication Request: No

Title

LOW TEMPERATURE FORMATION OF BACKSIDE OHMIC CONTACTS FOR VERTICAL DEVICES

438

LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).